DeTech IP
Assets Assessment

October 29, 2021

DeTech IP Assessment motivation

There are currently three methods of valuing intellectual property: cost-based, market– based, and income-based valuations.

• **Cost-based valuation** takes into consideration both how much it cost to create the asset historically and how much it would cost to recreate it given current rates.

• **Market-based valuation** looks at comparable market transactions, whether sale or purchase, of similar assets to arrive at conclusions of value.

• **Income-based valuation** looks at the stream of income attributable to the intellectual property based on the historical earnings and expected future earnings.

We, at DeTech, deal with IP assets on the complete innovation cycle from the ideation to the commercialization and thus need more flexible methodology applicable even on the early stages of IP assets development, where above listed methods fail and can not be applied.

Initial IP Assessment at Day1

Therefore, we have developed the DeTech Market Fair Value approach. First assessment of IP assets potential comprises three integral components:

1. Potential of industry segment (based on VC segment investments from previous year and rolling current year quarters)

2. Number of patents within segment in the previous year

3. Number of papers within segment in the previous year

The underlying potential segment indicator PS (from 0 to 100) is calculated as follows:

$$PS=(VC/AVC*0,7+NP/ANP*0,2+NS/ANS*0,1)*100$$

On top of overall segment assessment PS, we apply 2 mandatory initial peer reviews (IPR) with conditions (low, mid, high) based on the following criterias:

1. Addressable market size (AMS)

2. Lead time to commercialization (LTC)

3. Level of disruption/innovation (LDI)

The underlying assessment index is calculated as follows:

$$IPR=AWS*0,4+LTC*0,3+LDI*0,3$$

Finally, overall initial IP asset trend assessment index (TAI):

$$TAI= (PS+IPR1+IPR2)/3$$

In the meantime of completing peer reviews resulting to IPR1 and IPR2, PS is used as TAI.

Benefit: This provides initial IP asset assessment from the Day1 of placement and will navigate price development of underlying F-NFT or pool of F-NFTs.

After finalizing initial IP assets assessment TAI, we continue with DeTech Decentralized Assessment System (DAS) which is a continuous peer review protocol for the evaluation of intellectual capital, where related index ECI (starting with TAI) will contribute to the continues asset development in terms of quality and reputation. AI/ML models will be initiated based on TAI and agent-based simulations and will be improved with each iteration in terms of IP asset development trends.

DAS implements the following components:

1. Continuous peer-review crowdsourcing

The core idea of the assessment is to continuously review contribution by people with similar competences as the producers of the asset.

2. Curation of review

To increase the accuracy of the evaluation we introduce a second layer of assessment, which is basically an open assessment of the review.

3. Additional Early stage review incentivation

Early stage reviews will be incentivized with extra DeTech coins.

4. Multi-dimensional quantitative quality indicator-ECI (Expertise Contribution Index)

The result of the review process a continuous log of structured data points is formalized by an algorithm in a metric reflecting the quality of an asset via ECI index.

Join wonderful DeTech.World